

# **SPD In-Car Video Response to the Community Police Commission and Monitoring Team**

November 30, 2013

This report was developed to respond to the recommendations from the Community Police Commission's In-Car Video (ICV) report of September 20, 2013 and the ICV issues raised by the Monitor in his draft semiannual report of November 15, 2013. The purpose of this report is to address the ICV related concerns, questions and recommendations from the Monitor and the CPC. This report describes the progress that has been made to date with the implementation of the new COBAN ICV system and outlines the plan for addressing the issues that have not yet been resolved.

## **Introduction**

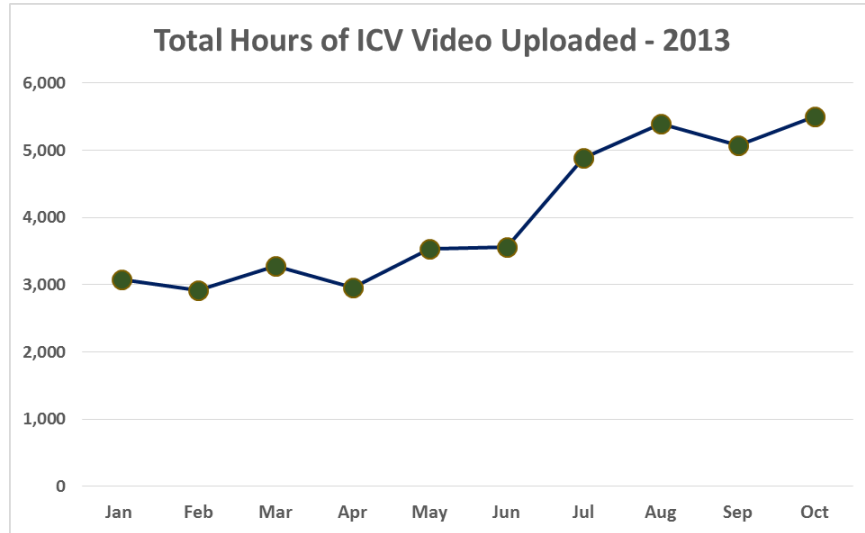
The current In-Car computer system provides a platform to supporting essential In-Car applications such as In-Car CAD client, Mobile Report Entry (MRE), In-Car Video Capture (ICV) and upload, Microsoft Office suite, GPS reception and Advanced Authentication (AA). The system provides regional connectivity via 4G cellular carrier and local wireless connectivity via 802.11n. The forecasted lifespan for this system is five years.

COBAN video capture software includes In-Car hardware and software and a back-office solution providing management of the captured video. The In-Car computer system includes a touch screen display, a forward facing color camera, rear-seat low light wide-angle camera and wireless microphones. In-Car video system supports GPS input and records latitude and longitude linked to the video to facilitate recovery of video from the back office system.

In August of 2012 the City of Seattle and SPD released a Request for Proposals (RFP) to replace the existing In-Car computer system which had already exceeded its lifespan by 1 year. COBAN was selected as the preferred vendor and was awarded the contract. The contract provides a five year warranty on both hardware and software, excluding consumables, (e.g. batteries) and extreme circumstances (e.g. vehicle accidents).

The installation of the new COBAN system took place from April through September of 2013. Currently the only marked vehicles which have not received the new system are the Harbor Unit Boats, 1 prisoner transport van and the 2 ALPR (Automatic License Plate Recognition) vehicles. Unmarked vehicles typically do not have COBAN installed.

The installation of the new ICV system has resulted in a significant increase in the amount of uploaded video. Currently over 5,000 hours of video is uploaded each month which is a 70% increase over the hours uploaded under the old system.



## **Recommendations from the Monitor and CPC**

1. **Recommendation:** Support the City Auditor's recommendation for SPD to prioritize procurement of technology and equipment that enable reliable creation and retention of ICV recordings.

### **SPD Response:**

- a. All in car videos have been moved to SPD's new COBAN storage system
  - b. SPD has doubled the existing amount of storage for video.
  - c. Video retention has been increased from 3 years (retained video) and up to 90 days (un-retained video) to a retention period that currently is permanent. The Department will be reviewing retention schedules with the Law Department and the Monitor in order to determine the retention period that will be necessary for compliance with the Settlement Agreement.
2. **Recommendation:** The ICV system should use the following triggers to record video: activation of overhead lights, activation of ICV microphone, speed threshold and crash sensor.

### **SPD Response:**

- a) The new ICV system currently triggers recording with the activation of overhead lights, with the activation of the officer ICV microphone and in a crash.
  - b) Effective January 1, 2014 the speed threshold trigger will be activated. The initial speed threshold will be set at 70mph. This speed was chosen to avoid the unnecessary activation of recording whenever a vehicle is driven on a freeway where the posted limit is 60mph. The 70mph threshold will be re-evaluated in 6 months to review the quantity and utility of the video collected. Adjustments to the speed threshold may be made at that time.
  - c) Manual activation of ICV may occur from the In-Car system touch screen and officer microphone.
3. **Recommendation:** Support the single sign-on procedure.

**SPD Response:** Single sign-on was implemented in vehicles with the new COBAN system in the second week of September 2013. Officers can now tap their electronic ID's and quickly log in to both the computer and the COBAN system simultaneously. Under the older COBAN system it would take users up to 5 minutes to access and log in.

4. **Recommendation:** The CPC does not support additional video triggering at car ignition, via GPS, or door, siren, or rifle lock release.

**SPD Response:** SPD does not intend to implement any of these triggers at this time.

5. **Recommendation:** Support geocoding which allows the searches of videos by location and area. The CPC supports geocoding because it helps search by specific location the recordings of incidents. Without geocoding, it is sometimes difficult to identify and retrieve recordings.

**SPD Response:** SPD's new system allows geocoding (GPS tagging) of audio and video recordings but requires additional steps to activate. Specifically, access to this feature requires the installation of Microsoft "Map Point Software" on computers available to supervisors. This software costs \$150 per license. The total estimate to have this completed is \$29,800. Additionally, training is currently being developed to be provided to supervisors on how to use this feature of the COBAN software.

6. **Recommendation:** Only emergent threats with dire consequences to officer or public safety shall prevent the activation of the ICV and its audio component. If an officer is prevented from immediately activating ICV, it shall be activated as soon as practical in the emergent situation.

**SPD Response:** SPD has drafted a new ICV policy which is attached to this report. The new draft policy states: "Employees will activate the ICV to record enforcement-related activity, unless doing so would jeopardize officer or public safety." Activation of ICV inherently includes activation of the audio part of that system.

7. **Recommendation:** Audio must be active when the ICV is on whether or not the activity is in camera view, subject to limited exceptions.

**SPD Response:** The new draft policy states that:

- a) The audio recording must operate simultaneously with the camera when the ICV system has been activated to record an event, even if the event itself is no longer within view of the camera.
- b) Exceptions are:
  - i. Conversations with confidential informants need not be recorded.
  - ii. Conversations that are protected under the basis of confidentiality by SMCs and RCWs need not be recorded.
  - iii. Personal conversations
  - iv. Conversations regarding strategic or tactical decisions in the field

8. **Recommendation:** The reason for any absence of recorded video must be documented.

**SPD Response:** The new draft policy states: “If this policy requires that an event be recorded, and there is no recording, employees must note why it was not recorded. Employees will note the existence or lack of video in an update on the MDC and any related GO report, Street Check, Notice of Infraction, Criminal Citation, or Traffic Contact Report (TCR).”

9. **Recommendation:** There should be one point of responsibility for ICV within the Department.

**SPD Response:** The overall management of the ICV system has been assigned by the Chief of Police to the Field Support Bureau Commander.

10. **Recommendation:** An ICV audit plan should be prepared.

**SPD Response:** An ICV Audit plan will include but not be limited to the following:

- a) A daily log is being created by SPD IT that will show each supervisor in SPD which officers under her/his command have signed on, captured video, the number of video's captured, and other data that can be compared to other officers with similar assignment. Each Supervisor (within units normally using ICV) will be required to review this daily log on a routine basis to identify and address any technical, policy, or other issues occurring under their supervision. Commanders will be required to periodically audit all supervisors under their command to insure compliance with this process. These reports are being designed to provide an easy mechanism to monitor ICV usage.
- b) The Use of Force review board will track situations in which no ICV exists involving a use of force situation. Except in those situations where policy allows and appropriate documentation of the reason exists, these cases will be referred to the Office of Professional Accountability for review of the reason no ICV exists, and any failures that may have occurred to document any actions taken by Supervisory or Command Officers.
- c) The Audit, Policy, and Research Section are including ICV in SPD's overall Audit Plan and Structure. The frequency of Department-wide Auditing of ICV related issues will be determined as part of the 2014 audit schedule being prepared for the Chief of Police.
- d) Each Supervisor and or Commander is responsible for managing the personnel under their command. Where issues arise Supervisors and Commanders are required to address, document, or refer issues to appropriate places within SPD. Access to / review of an officer's ICV by supervisors is governed to a certain degree by labor agreements. The supervisor's role in reviewing ICV video has been changing and will continue to evolve as issues arise with the new system. Supervisors have had opportunities to review an officer's ICV footage when trying to identify evidence,

validating an officer's actions or helping improve performance. Some examples of incidents in which this occurs on a regular basis include use of force incidents, vehicle collisions and complaints of misconduct generated by either a member of the department or from community members or responses to significant incidents.

A SPD workgroup, with members from FIT, IT, APRS, and Video Unit, is currently developing an auto-generated report from COBAN that will assist with auditing. This report will be a compilation of information that will generate on use of force incidents.

**11. Recommendation:** A well-documented ICV Training Plan should be developed.

**SPD Response:** Captain O'Donnell, the new Commander of the Education and Training Section has been tasked with providing a comprehensive written training plan for ICV that outlines planned approaches to other multi-dimensional training programs. The due date for this plan is December 27, 2013. This training plan is expected to include:

- a) An overview section to provide readers with a basic understanding of the who, what, when, where, and why of the training.
- b) An outline of how the training impacts each level of responsibility from the line officer to the Chief of Police.
- c) A values section that allows the Chief or chain of command to provide insight and guidance into the intent of the training and how it impacts our pursuit of excellence.
- d) Inclusion of the policy, procedure, or program being trained.
- e) A list of training methods to be used - Including how training is divided among the various mediums if appropriate.
- f) A plan for providing remedial instruction to those who fail to master the material via the planned approach.
- g) An explanation of what system will be used to identify individuals who have completed the training and those who have not, including what accountability measures are expected of department employees, especially Commanders.
- h) A timeline and staffing plan for delivery of the training.
- i) Expected actions of Officers and Commanders who have completed the training.
- j) Methodology for auditing training for effectiveness (e.g. focus groups, survey of officers, OPA, Audit information on non-compliance, etc.).

The current ICV training for the new COBAN system is broken down into a series of e-learning modules which have been fully deployed. A notice has been sent to all affected commanders that the training is mandatory for all personnel within their command in order to use the newly installed COBAN equipment.

Prior ICV training is only valid for using the old COBAN equipment. The new ICV equipment requires new training and standards. Previously trained personnel are only authorized to use the old equipment until such time as it is replaced during the installation period. Personnel

are mandated to take the e-Learning modules for use of the new equipment. The last training module requires the officer to have been assigned the new microphone.

The ETS maintains the training records for all personnel in the Department including the ICV training. The application that is used by the ETS to determine who needs ICV training draws from the video unit and PEDS database for all Department personnel. The requirement for ICV training will depend on the assignment of the individual employee and the availability of the new equipment.

As the new systems are put into service and new policies are implemented, lessons will be learned and new issues will arise. These will be incorporated into the e-Learning modules as needed. The e-Learning format allows for revisions or updates to occur when needed and are only delayed by the development process which is dependent upon the dynamics of the revision or update (i.e. text based updates can be accomplished relatively quickly while video content requires more time to create and convert).

There is an annual review that occurs with all of the ETS training programs to assess several factors including is the content relevant, current, appropriate, etc. This review is conducted in the first quarter of each calendar year.

**12. Recommendation:** Training should provide techniques that will allow officers to improve the quality of their video and audio recordings.

**SPD Response:** Training that emphasizes how to ensure quality video and audio has been developed by the ETS and is currently in the review and approval process prior to deployment. Additionally, the Department “Reader-Board” is being utilized to communicate urgent training tips and technical updates to officers while the new curricula is being developed and approved. Whenever an ICV issue or problem is identified, the goal is to have IT, APRS and ETS evaluate the concern and publish “Reader-Board” information for officers while the training is being formally developed. Once the training is approved and finalized it can be delivered through e-Learning or e-roll call, both of which have the same training record application.

Officers and reviewing personnel have noted a “quality issue” when multiple ICV wireless microphones are in the same area at one time. This issue has been escalated and reported to COBAN who is currently evaluating the issue and working on a technical solution. Additionally, the department “Reader-board” is being utilized to communicate best practices for In-car antenna alignment to improve ICV wireless microphone sound quality.

**13. Recommendation:** ICV training should include a module for supervisory responsibilities.

**SPD Response:** ICV training is part of the Sergeant Academy that is in final development. This year ETS adopted a process that has all section personnel and FTOs receive section training first before full roll-out to the Department as a whole. Street Skills was a successful test of the system and the e-Learning modules are required for these personnel as well.

**14. Recommendation:** ICV training should tell officers what to do if video recordings from a prior shift have not been uploaded?

**SPD Response:** This type of training should not be needed since uploading will occur automatically at log on by another officer. Pre-checks when logging on may indicate if a hard drive device has not been returned to the car but training should also show officers that when they upload in the precinct, the hard drive should be returned to the car.

The new draft policy has the following language: “At the start of a shift, employees will check to ensure that the ICV is working properly.” Officers are being trained to conduct a “conditions check” to confirm their video and audio are working properly. This also ensures that the hard drive is installed in their vehicle. Additionally, the draft policy states, “Employees shall upload recorded video before going out of service. If the upload is not completed before the end of shift, employees will notify a sergeant.”

**15. Recommendation:** ICV training should explain where or how to note in GO reports that a video has been uploaded or if it was not uploaded, why it was not uploaded.

**SPD Response:** This is difficult to address as the officer may not be aware that the video did not upload before the GO is completed. The Video Unit and IT are routinely called upon to address these issues and have their own logging and recording system for these incidents.

The draft policy states, “Employees will document the existence of video or reason for lack of video. Officers will enter the event number(s) associated with the videos, into COBAN, on the MDC. If this policy requires that an event be recorded, and there is no recording, officers must note why it was not recorded. Officers will note the existence or lack of video in an update on the MDC and any related GO Report, Street Check, Notice of Infraction, Criminal Citation, or Traffic Contact Report (TCR).

The documentation of the existence of a COBAN video in a GO report as well as the CAD system will be more relevant and timely indicator of the existence of a video rather than if a video has been uploaded, when writing a report.



**16. Recommendation:** SPD should develop a standard electronic request form that includes all of the information the Video Unit needs to conduct a search. The Video Unit should develop a simple, uniform system for recording receipt and work performed on each request.

**SPD Response:** SPD is in the final stages of developing an electronic request for internal document requests for ICV. SPD has not yet developed a similar tool for external requestors. The SPD Video unit has developed an In-Car Video Public Disclosure Request form which lists all of the information that videos for an incident may be searched by. The form includes the following fields:

- Officer Name
- Officer Serial Number
- Date of Incident
- Time of Incident
- Location of Incident
- GO Number
- Type of Incident
- If Two Person Car the Name of Second Officer
- Additional Officers involved at Scene

The Video unit has a system for tracking all requests for videos and the work being done on those requests.

**17. Recommendation:** SPD should provide access to the COBAN database for more personnel within SPD as well as the OPA Auditor and the City Attorney.

**SPD Response:** SPD has expanded COBAN access to the Public Disclosure and Records Unit, OPA, Homicide and Traffic Collision Investigation Squad detectives, and all supervisors with rank of Sergeant and above. Additional end-user documentation is in process, and training will be evaluated as needed.

**18. Recommendation:** SPD prematurely accepted the contract with COBAN. Will COBAN be contractually obligated to assist the Department in troubleshooting the new ICV system?

**SPD Response:** COBAN is under a five year hardware and software support agreement. COBAN is currently working to resolve problems with equipment and software that SPD has identified. The support agreement also provides software upgrades throughout the life of the contract.

19. **Recommendation:** Resolve the problems with the configuration of the mute and on/off buttons on the ICV microphones.

**SPD Response:** The Use of Force Review Board has identified a common problem with officers inadvertently muting their ICV microphones. Additionally, the Board found that when was available it was, at times, of low quality. A workgroup comprised of SPD Patrol Officers, IT section, Video Unit, FIT, and Professional Standards staff was convened on 11/21/2013 to discuss the issues identified with the wireless microphones and propose solutions. As was expected, the mute button feature on the wireless microphone (button 1) was consistently being depressed as a result of its elongated shape and raised profile on the body of the microphone. The microphones are in the process of being reconfigured as noted in the diagram below.

Currently:

REC = Record, 1=Mute, 2= Covert Mode, REC+1 = Covert Microphone (no lights on mic) (hold for 3 seconds)

\*Also works in reverse\*



Proposed:

REC = Record, 1 = Rear Camera, 2 = Mute, REC + 1 = Covert Microphone (no lights on mic) (hold for 3 seconds)

\*Also works in reverse\*

The workgroup also examined the issue of audio quality. If the external antenna attached to the microphone is damaged in any way, the useful range and quality is reduced by about 50% of capability. Officers report that the antenna is extremely fragile and often breaks within a week of issuance. The wireless microphones have an internal antenna which is 70-80% effective when no external antenna is attached. As a result of this initial assessment, the Department will be piloting complete removal of the antennae at one precinct and assessing the audio range and audio quality. If the pilot is successful, the remainder of the users will remove the external antennae as well. The Department will start the pilot in mid-December 2013.

Another audio quality issue has been identified when multiple officers are in the same area with activated wireless microphones. The IT department is working to address this issue, which has been escalated to COBAN for review and correction.

20. **Recommendation:** An IT representative should attend all Use of Force Review Board and Firearms Review Board meetings and, when audio or video is unavailable, should be responsible for determining whether the involved equipment is functioning appropriately.

**SPD Response:** SPD has identified a representative from IT who will attend all UOFRB meetings. This person can speak to the status of any pending service requests for the ICV system and can respond to any general questions or concerns regarding the quality of audio and video. Additionally, SPD is revising its policies and procedures for the Firearms Review Board and will examine adding IT staff as an observer.

The Seattle Police Department has an IT service request program called “HEAT”. Members of the FIT have been given access to the HEAT system so that they can review for inoperable equipment reported by officers during their condition check at the beginning of the shift.

21. **Recommendation:** Resolve all ICV audio issues. Rear vehicle microphone issues should be re-configured to work seamlessly with all other audio equipment so as to maximize sound quality.

**SPD Response:** The new COBAN system is based on two audio channels recorded on video captured from the front or rear ICV camera. COBAN has proposed a solution to enhance audio quality by configuring the system such that the front camera captures audio from Microphone 1 (driver) and Microphone 2 (passenger) and the rear camera will capture audio from Microphone 1 and the in-car microphone.

Another audio problem that has been identified is sound interference from the vehicle’s AM/FM radio. COBAN has been contacted and has proposed a solution that includes installation of a new circuit board that will automatically disengage the AM/FM radio when the ICV is activated. The initial quote to have the circuit boards installed in all department vehicles is \$127,730. The solution is currently being tested in four department vehicles.

22. **Recommendation:** SPD should implement an ongoing, forward-looking quality assurance program to ensure that all ICV equipment remains fully operational and functional.

**SPD Response:** The IT section has begun conducting monthly quality assurance site visits. This tool will help identify issues with the system and allow an opportunity to talk with officers to see what is being experienced. Below is a summary of the ICV Site Maintenance report for November 19, 2013 which occurred at the East Precinct.

*This is our second ICV Quality Assurance site visit. We learned a lot from the last visit and this time we are able to QA 31 vehicles out of 39 according to the motor pool list. This had representatives from the IT Unit and Video Unit. We found that it is much more efficient to have one IT person team up with one Video person to work on each vehicle. The purpose of this trip was to ensure our ICV equipment in each police vehicle remains in good working condition. Our goal is to keep the quality of the video/audio in high standards.*

*Summary of activity:*

- We replaced 8 broken and 3 missing wireless microphone antennas from Precinct gang chargers.*
- We placed a yellow label on each car monitor that indicates how to position the wireless microphone when synchronizing to the receiver. "Mic #1 on the left side and Mic #2 on the right side"*
- We have noticed and noted there were three vehicles that had over 70 videos on the external hard drive. Hard drives have been replaced and HEAT tickets are open for these vehicles for further testing.*
- Identified one vehicle that has a problem launching COBAN and the computer has been reimaged and tested.*
- Identified one vehicle that has a problem processing video and computer has also been reimaged and tested.*
- Identified one vehicle that still had the older version of COBAN application (prior to SSO) and was having trouble wirelessly uploading videos. The problem has been resolved and the current version of COBAN application has been updated and tested.*

*On our checklist, Dennis and I agreed that we should add the following two items on the list:*

- Test Two Officer Sign on*
- Write down the total videos we have recorded from the test.*

*Here is what the team performed when we were at the precinct:*

- Clean monitor/display screen of each system.*
- Replacing Microphones-Microphone antennas-Microphone battery if necessary.*
- Team deployed 10 new Microphone antennas to devices in gang chargers. Seven antennas were removed that were broken.*
- Test Recording in each system to ensure the quality of the video/audio meets our standards.*
- Test Microphone range to ensure the quality of the audio records properly from a far distance.*
- Test Wireless upload to make sure the upload speed and our Wireless Access Points are working properly.*
- Opened a HEAT ticket for each unit tested and results of test and documented if follow up required.*
- Discuss any operational issues, concern or suggestions with officers that could improve the overall operation of the system.*

*East Precinct Maintenance checklist. The following vehicles have been QA'd:*

*31578, 89117, 31492, 89162, 31575, 31493, 89169, 59849, 79916, 89168, 79917, 31600, 89177, 89124, 89121, 99240, 89155, 89181, 89178, 89173, 89176, 31577, 31495, 79930, 79976, 31487, 31571, 31582, 89186, 99232*